

Application No. 10/785,658
Response dated: January 31, 2006
Reply to Office action of October 31, 2005

REMARKS

In response to the Office Action dated October 31, 2005, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-17 are pending in the present Application. Claims 1 and 3 are amended and Claims 12-16 are withdrawn, leaving Claims 1-11 and 17 for consideration upon entry of the present amendments and following remarks.

Support for the claim amendments is at least found in the specification, the figures, and the claims as originally filed. Particularly, the support for amended Claim 1 is at least found in originally filed Claim 3 and the specification at page 6, line 11 through page 7, line 5. Support for amended Claim 3 is at least found in the originally filed specification at page 10, line 14 through page 11, line 9.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Double Patenting

Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 32 of co-pending Application No. 10/846,043. The Examiner alleges that although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 32 of 10/846,043 anticipates Claim 1 of the instant application. Applicants respectfully traverse.

Claim 1 of the instant application claims a display devices comprising:

- a display surface through which input light is applied from an external object;
- a color filter having color pixels that are arranged to form a planar surface substantially parallel with the display surface; and
- a substrate having at least one light sensing portion disposed to face corresponding one of the color pixels, the at least one light sensing portion sensing light provided through the corresponding color pixel.

(Emphasis added.)

Application No. 10/785,658
Response dated: January 31, 2006
Reply to Office action of October 31, 2005

In contrast, however, it is respectfully submitted that Claim 32 of co-pending Application No. 10/846,043 claims a display panel comprising:

a color filter layer having colored regions and a transparent region, the photo-sensor being disposed at a location corresponding to the transparent region so that the light provided from the light pen traveling to the photo-sensor through the transparent region of the color filter layer.

(Emphasis added.)

More particularly, Claim 1 of the instant application neither requires, nor suggests, a photosensor/light sensing portion being disposed corresponding to a transparent as in Claim 32 of the co-pending Application 10/846,043. Further, Claim 1 of the instant application neither requires, nor suggests, sensing light provided through the transparent region, as alleged by the Examiner.

In contrast, Claim 1 of the instant application recites a color filter having color pixels that are arranged to form a planar surface substantially parallel with the display surface and a substrate having at least one light sensing portion disposed to face corresponding one of the color pixels, the at least one light sensing portion sensing light provided through the corresponding color pixel. Thus, the display panel and the photo-sensor being disposed at a location corresponding to the transparent region so that light is provided through the transparent region of the color filter layer of co-pending Application No. 10/846,043 is directly contrary to the light sensing portion corresponding to color pixels and light provided through color pixels of Claim 1 of the instant application.

Therefore, it is respectfully submitted that Claim 1 of the instant application is not anticipated by Claim 32 of co-pending Application No. 10/846,043 and is therefore patentably distinct from Claim 32 of co-pending Application No. 10/846,043. Reconsideration and withdrawal of the provisional double patenting rejection of Claims 1 is respectfully requested.

Application No. 10/785,658
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Claim Rejections Under 35 U.S.C. §102

Claims 1, 7-9 and 11 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,204,661 to Hack, et al., (hereinafter "Hack"). Applicants respectfully traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Amended Claim 1 recites:

a color filter having color pixels that are arranged to form a planar surface substantially parallel with the display surface, the color pixels including red, green and blue color pixels; and
a substrate having at least one light sensing portion disposed to face corresponding to the red color pixel, the at least one light sensing portion sensing light provided through the corresponding red color pixel.

The Office Action details state that Hack does not explicitly recite a red color pixel. (See, page 5 of the Office Action.) Hack discloses placing a non-defined color filter over individual sensors, part of the sensor array or the entire sensor array. (Col. 11, lines 20-44.) Therefore, Hack fails to disclose color pixels including red, green and blue color pixels and a substrate having at least one light sensing portion disposed to face corresponding to the red color pixel, the at least one light sensing portion sensing light provided through the corresponding red color pixel of amended Claim 1.

Thus, Hack fails to disclose all of the limitations of amended Claim 1. Accordingly, Hack does not anticipate amended Claim 1. Applicants respectfully submit that Claim 1 is not further rejected or objected and is therefore allowable. Claims 7-9 and 11 inherit all of the limitations of amended Claim 1. Applicants respectfully submit that Claims 7-9 and 11 are also not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 1, 7-9 and 11 is respectfully requested.

Application No. 10/785,658
Response dated: January 31, 2006
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Claim Rejections Under 35 U.S.C. §103

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claims 2 and 3 are rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of U.S. Patent No. 6,778,238 to Moon, et al., (hereinafter "Moon").

Claim 4 is rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of Moon and further in view of U.S. Patent No. 4,097,128 to Matsumoto, et al., (hereinafter "Matsumoto").

Claim 5 is rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of Moon and further in view of U.S. Patent Publication No. 2002/0021291 to Cook, (hereinafter "Cook").

Claim 6 is rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of Matsumoto.

Claim 10 is rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of U.S. Patent No. 5,485,177 to Shannon, et al., (hereinafter "Shannon").

Claim 17 is rejected under 35 U.S.C. §103(a) as being obvious over Hack in view of U.S. Patent No. 6,099,185 to Huang, et al., (hereinafter "Huang").

Claims 2, 4-6, 10 and 17 inherit all of the limitations of amended Claim 1. As discussed above, Hack fails to disclose color pixels including red, green and blue color pixels and a substrate having at least one light sensing portion disposed to face corresponding to the red color pixel, the at least one light sensing portion sensing light provided through the corresponding red color pixel of amended Claim 1.

Moon is relied upon as disclosing red, green and blue color filters to create a color display through the standard combination of primary colors. Matsumoto is relied upon as

Application No. 10/785,658
Response dated: January 31, 2006
Reply to Office action of October 31, 2005

disclosing a wavelength of 600nm to 700nm produces a distinct red light. Cook is relied upon as disclosing a stylus (light pen) for an LCD and that the LED generating the light for this stylus may be white. Shannon is relied upon as disclosing an analogous pixel portion with light sensing portion taking up only a part of the pixel area and all the circuitry in a single layer, rather than stacked. Applicants find no disclosure in Moon, Matsumoto, Cook and Shannon of color pixels including red, green and blue color pixels and a substrate having at least one light sensing portion disposed to face corresponding to the red color pixel, the at least one light sensing portion sensing light provided through the corresponding red color pixel of respective Claims 2, 4-6, 10 and 17.

Amended Claim 3 recites:

The display device of claim 1, wherein red light is provided to the at least one light sensing portion only through the red color pixel.

As discussed above, Hack fails to disclose a red color pixel. Applicants find no disclosure in Hack and Moon regarding red light is provided to the at least one light sensing portion only through the red color pixel of amended Claim 3.

Thus, Hack, Moon, Matsumoto, Cook and Shannon, alone or in combination, do not disclose *all of the limitations* of amended Claim 3 and Claims 2, 4-6, 10 and 17. Accordingly, *prima facie* obviousness does not exist regarding amended Claim 3 and Claims 2-6, 10 and 17 with respect to Hack, Moon, Matsumoto, Cook and Shannon.

Since Hack, Moon, Matsumoto, Cook and Shannon fail to teach or suggest all of the limitations of Claims 2-6, 10 and 17, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Thus, *prime facie* obviousness does not exist regarding Claims 2-6, 10 and 17 with respect to Hack, Moon, Matsumoto, Cook and Shannon. Applicants respectfully submit that Claims 2-6, 10 and 17 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 2-6, 10 and 17 is respectfully requested.

Application No. 10/785,658
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Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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